

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name "BRITISH CAUTION"	Official Number 180823	Nationality and Port of Registry British. London.	Gross Tonnage 8552	Date of Build 1946	Port of Survey NEWCASTLE-ON-TYNE
Moulded Dimensions: Length ^{462.90} 462'-10 3/4" Breadth 61'-9" Depth 34'-0 1/2"					Date of Survey During Construction
Moulded displacement at moulded draught = 85 per cent. of moulded depth 18,198. tons					Surveyor's Signature E.H. Dean.
Coefficient of fineness for use with Tables 0.770					Particulars of Classification +100A.1. Carrying Petroleum in bulk (contemplated).

DEPTH FOR FREEBOARD (D).		DEPTH CORRECTION.		ROUND OF BEAM CORRECTION.	
Moulded depth	34'-0 1/2"	(a) Where D is greater than Table depth (D-Table depth) R =		Moulded Breadth (B)	61'-9"
Stringer plate	0.06'	(34-10-30-86) 3.0 = 9.72		Standard Round of Beam = $\frac{B \times 12}{50}$	14.82
Sheathing on exposed deck		(b) Where D is less than Table depth (if allowed) (Table depth-D) R =		Ship's Round of Beam	15.8"
$T \left(\frac{L-S}{L} \right) =$		If restricted by superstructures		Difference	0.68
Depth for Freeboard (D) =	34.10			Restricted to	
				Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L} \right)$	$\frac{0.68}{4} \times 0.5819 = 0.10$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed <i>equus</i>	98.56	98.56	8'-7" at A.P.		98.56
" overhang	4'-0"	1.51	8'-0" at Fwd.		1.51
R.Q.D. enclosed	3.02				
" overhang					
Bridge enclosed <i>equus</i>	43.05	43.05	8'-0"		43.05
" overhang aft	3'-6"	2.62			2.62
" overhang forward	3'-6" 1.07	53			53
F'cle enclosed <i>equus</i>	48'-11 1/2"	47.30	8'-0"		47.30
" overhang	47.30				
Trunk aft					
" forward					
Tonnage opening aft					
" forward					
Total	196.50	193.57			193.57

Standard Height of Superstructure 7.5
R.Q.D.
Deduction for complete superstructure 42.0
Percentage covered $\frac{S}{L} = 42.45$
 $\frac{S_1}{L} = 41.81$
Percentage from Table, Line A. Tanker 32.81
(corrected for absence of forecastle (if required))
Percentage from Table, Line B.
(corrected for absence of forecastle (if required))
Interpolation for bridge less than .2L (if required) Tanker
Deduction = 42.0 x 32.81 = 13.78

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P.	56.29	1	56.29	43.00	43.00	1	43.00
1/2 L from A.P.	25.05	4	100.20	1'-9 7/8"	21.87	4	87.48
1/2 L "	6.19	2	12.38	6"	6.00	2	12.00
Amidships		4				4	
1/2 L from F.P.	12.38	2	24.76	1'-0 1/4"	12.25	2	24.50
1/2 L "	50.10	4	200.40	4'-2 1/8"	50.12	4	200.48
F.P.	112.58	1	112.58	9'-8"	113.00	1	113.00
Total			506.61				480.46

Mean actual sheer aft = Deficient > 75% standard
Mean standard sheer aft
Mean actual sheer forward = Excess
Mean standard sheer forward
Length of enclosed superstructure forward of amidships = Tanker
aft of " = "

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{26.15}{18} \left(.75 - \frac{21.22}{53.78} \right) = .78$
If limited on account of midship superstructure. ✓
If limited to maximum allowance of 1 1/2 ins. per 100 ft. ✓

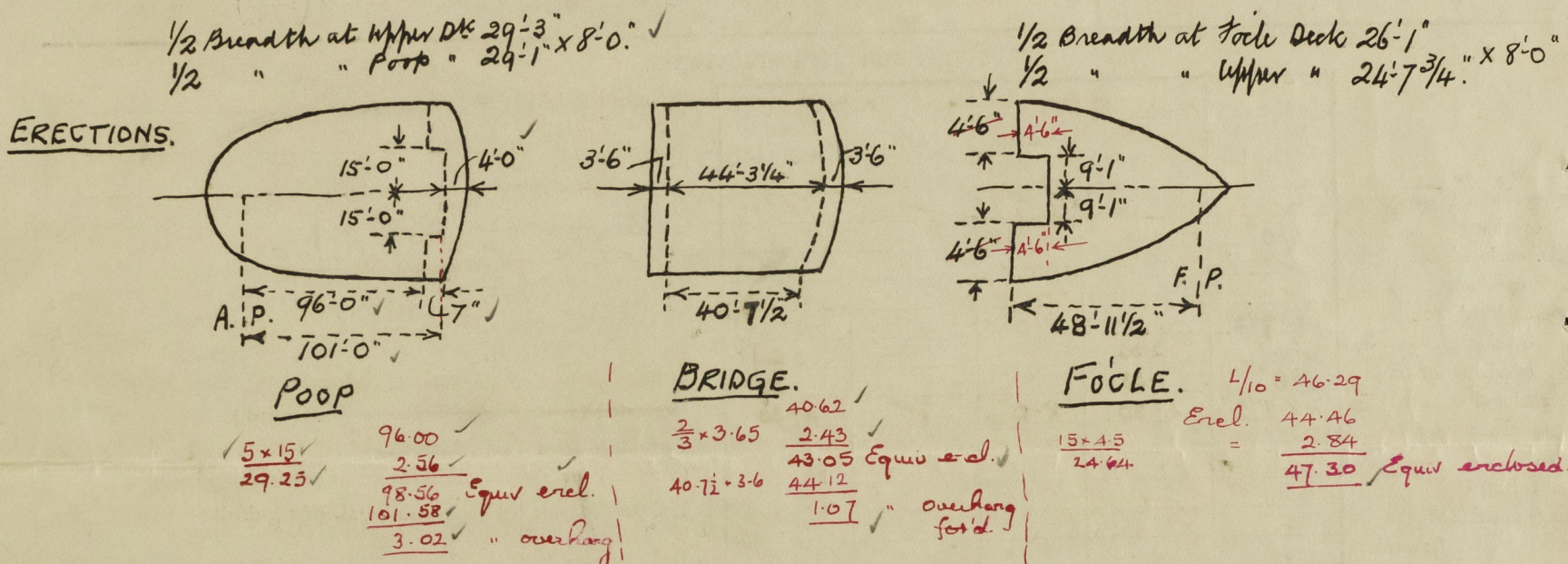
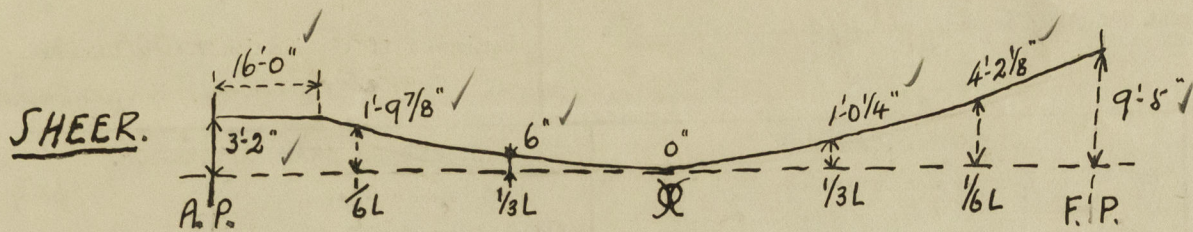
Deduction for Tropical Freeboard. Addition for Winter and Winter North Atlantic Freeboard. Depth to Freeboard Deck = 34.10 Summer freeboard = 6.69 Moulded draught (d) = 27.41 Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = 6.85 = 6 3/4" Addition for Winter North Atlantic Freeboard (if required) = 6.85 + 4.63 = 11.48 = 11 1/2"	Deduction for Fresh Water. Displacement in salt water at summer load water line $\Delta = 17,239$ Tons per inch immersion at summer load water line $T = 58.11$ Deduction = $\frac{\Delta}{40 T}$ inches = 7.42 = 7 1/2"	TABULAR FREEBOARD Tanker corrected for Flush Deck (if required) Correction for coefficient $\frac{68 + .770}{1.36} = \frac{1.45}{1.36}$ <table border="1"> <tr> <th></th> <th>+</th> <th>-</th> </tr> <tr> <td>Depth Correction</td> <td>9.72</td> <td></td> </tr> <tr> <td>Deduction for superstructures</td> <td></td> <td>13.78</td> </tr> <tr> <td>Sheer correction</td> <td>.78</td> <td></td> </tr> <tr> <td>Round of Beam correction</td> <td></td> <td>.10</td> </tr> <tr> <td>Correction for Thickness of Deck amidships</td> <td></td> <td></td> </tr> <tr> <td>Other corrections, scantlings, etc.</td> <td></td> <td></td> </tr> <tr> <td></td> <td>10.50</td> <td>13.88</td> </tr> </table> Summer Freeboard = 80.22		+	-	Depth Correction	9.72		Deduction for superstructures		13.78	Sheer correction	.78		Round of Beam correction		.10	Correction for Thickness of Deck amidships			Other corrections, scantlings, etc.				10.50	13.88
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SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck :-

Tropical Fresh Water Line above Centre of Disc	14 1/4"	Tropical Fresh Water Freeboard	5'-6"
Fresh Water Line	7 1/2"	Fresh Water	6'-0 3/4"
Tropical Line	6 3/4"	Tropical	6'-1 1/2"
Winter Line below	6 3/4"	Winter	7'-3"
Winter North Atlantic Line	11 1/2"	Winter North Atlantic	7'-13 1/4"

British Caution

A new form should be prepared if any alterations that affect the freeboard have been made. If no such alterations have been made, the Surveyor should endorse the form on this side with his signature and the date.



Displacement @ 28'-0" 17589 Tons. ✓ Tons per inch 58.32 Tons. ✓
" @ 27'-0" 16890 " ✓ " " " 57-90 " ✓
Depth of Keel 1" ✓

Trade of ship Ocean going Tanker. *Mr V.*
Names of sister ship "BRITISH VIRTUE". Newcastle on Tyne report no. 102894.
Builder's name and yard number Swan Hunter Wigham Richardson Ltd. No 1764.
Owners British Tanker Co. Ltd.
Fee £



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